AMENDMENTS TO THE CLAIMS

1. (canceled)

2. (canceled)

3. (currently amended) A radius arm type truck comprising:

a base frame;

an axle box for supporting an axle;

a radius arm rotatably supported by the base frame at one end thereof and connected to the axle box at an opposite end thereof; and

a coil spring provided as a primary spring between an upper portion of the axle box and the base frame;

wherein the coil spring is formed by a nonlinear characteristic spring having a tapered portion having a spring wire diameter that gradually decreases as it is closer to an end portion of a spring wire in a region of active coils of the coils spring.

4. (original) The radius arm type truck according to claim 3, further comprising:

a lower spring seat provided on the upper portion of the axle box with a first elastic member disposed between the lower spring seat and the axle box; and

an upper spring seat provided on the base frame with a second elastic member disposed between the upper spring seat and the base frame, wherein

the coil spring is mounted between the upper spring seat and the lower spring seat.

5. (original) The radius arm type truck according to claim 3, wherein the coil spring has a constant-diameter portion having a constant wire diameter, and the tapered portion is formed continuously on each of both ends of the constant-diameter portion.

6. (original) The radius arm type truck according to claim 3, wherein the truck is constructed to run along a railroad provided with a third rail for power supply arranged in parallel with a rail for running, and

current collector that comes in elastic contact with the third rail is attached to the base frame.

7. (newly added) A railway vehicle comprising:

a radius arm type truck including:

a base frame;

an axle box for supporting an axle;

a radius arm rotatably supported by the base frame at one end thereof and connected to the axle box at an opposite end thereof; and

a coil spring provided as a primary spring between an upper portion of the axle box and the base frame, wherein

the coil spring is formed by a nonlinear characteristic spring comprised of a constant-diameter portion and tapered portions in a region of active coils of the coil spring, the constant-diameter portion having a constant wire diameter, the tapered portions formed continuously with both ends of the constant-diameter portion and having a spring wire diameter that gradually decreases as it is closer to an end of a spring wire of the coil spring, and wherein

the coil spring is configured such that a smaller range of a spring constant thereof corresponds to a range from an empty state to a common load state between the empty state and full passenger state of the vehicle.

8. (newly added) The railway vehicle according to claim 7, wherein the common load state is a substantially fixed-number passenger state of the vehicle.